# Suicide in the U.S.: Statistics and Prevention

Suicide is a major, preventable public health problem. In 2004, it was the eleventh leading cause of death in the U.S., accounting for 32,439 deaths. The overall rate was 10.9 suicide deaths per 100,000 people. An estimated eight to 25 attempted suicides occur per every suicide death.

Suicidal behavior is complex. Some risk factors vary with age, gender, or ethnic group and may occur in combination or change over time.

## What are the risk factors for suicide?

Research shows that risk factors for suicide include:

- depression and other mental disorders, or a substance-abuse disorder (often in combination with other mental disorders). More than 90 percent of people who die by suicide have these risk factors.<sup>2</sup>
- stressful life events, in combination with other risk factors, such as depression. However, suicide and suicidal behavior are not normal responses to stress; many people have these risk factors, but are not suicidal.
- prior suicide attempt
- family history of mental disorder or substance abuse
- family history of suicide
- family violence, including physical or sexual abuse
- firearms in the home, <sup>3</sup> the method used in more than half of suicides
- incarceration
- exposure to the suicidal behavior of others, such as family members, peers, or media figures.<sup>2</sup>

Research also shows that the risk for suicide is associated with changes in brain chemicals called neurotransmitters, including serotonin. Decreased levels of serotonin have been found in people with depression, impulsive disorders, and a history of suicide attempts, and in the brains of suicide victims. <sup>4</sup>

# Are women or men at higher risk?

- Suicide was the eighth leading cause of death for males and the sixteenth leading cause of death for females in 2004. 1
- Almost four times as many males as females die by suicide.<sup>1</sup>

• Firearms, suffocation, and poison are by far the most common methods of suicide, overall. However, men and women differ in the method used, as shown below.

Suicide by:	Males (%)	Females (%)	
Firearms	57	32	
Suffocation Poisoning	23 13	20 38	

# Is suicide common among children and young people?

In 2004, suicide was the third leading cause of death in each of the following age groups.<sup>1</sup> Of every 100,000 young people in each age group, the following number died by suicide:<sup>1</sup>

- Children ages 10 to 14 1.3 per 100,000
- Adolescents ages 15 to 19 8.2 per 100,000
- Young adults ages 20 to 24 12.5 per 100,000

As in the general population, young people were much more likely to use firearms, suffocation, and poisoning than other methods of suicide, overall. However, while adolescents and young adults were more likely to use firearms than suffocation, children were dramatically more likely to use suffocation.<sup>1</sup>

There were also gender differences in suicide among young people, as follows:

- Almost four times as many males as females ages 15 to 19 died by suicide.<sup>1</sup>
- More than six times as many males as females ages 20 to 24 died by suicide.<sup>1</sup>

## Are older adults at risk?

Older Americans are disproportionately likely to die by suicide.

- Of every 100,000 people ages 65 and older, 14.3 died by suicide in 2004. This figure is higher than the national average of 10.9 suicides per 100,000 people in the general population. <sup>1</sup>
- Non-Hispanic white men age 85 or older had an even higher rate, with 17.8 suicide deaths per 100,000.<sup>1</sup>

# Are Some Ethnic Groups or Races at Higher Risk?

Of every 100,000 people in each of the following ethnic/racial groups below, the following number died by suicide in 2004.

- Highest rates:
  - Non-Hispanic Whites 12.9 per 100,000
  - American Indian and Alaska Natives 12.4 per 100,000
- Lowest rates:
  - Non-Hispanic Blacks 5.3 per 100,000
  - Asian and Pacific Islanders 5.8 per 100,000
  - Hispanics 5.9 per 100,000

## What are some risk factors for nonfatal suicide attempts?

- As noted, an estimated eight to 25 nonfatal suicide attempts occur per every suicide death. Men and the elderly are more likely to have fatal attempts than are women and youth.<sup>2</sup>
- Risk factors for nonfatal suicide attempts by adults include depression and other mental disorders, alcohol abuse, cocaine use, and separation or divorce. <sup>6,7</sup>
- Risk factors for attempted suicide by youth include depression, alcohol or other drug-use disorder, physical or sexual abuse, and disruptive behavior.<sup>7,8</sup>
- Most suicide attempts are expressions of extreme distress, not harmless bids for attention. A person who appears suicidal should not be left alone and needs immediate mental-health treatment.

## What can be done to prevent suicide?

Research helps determine which factors can be modified to help prevent suicide and which interventions are appropriate for specific groups of people. Before being put into practice, prevention programs should be tested through research to determine their safety and effectiveness. For example, because research has shown that mental and substanceabuse disorders are major risk factors for suicide, many programs also focus on treating these disorders.

Studies showed that a type of psychotherapy called cognitive therapy reduced the rate of repeated suicide attempts by 50 percent during a year of follow-up. A previous suicide attempt is among the strongest predictors of subsequent suicide, and cognitive therapy helps suicide attempters consider alternative actions when thoughts of self-harm arise. <sup>10</sup>

Specific kinds of psychotherapy may be helpful for specific groups of people. For example, a recent study showed that a treatment called dialectical behavior therapy reduced suicide attempts by half, compared with other kinds of therapy, in people with borderline personality disorder (a serious disorder of emotion regulation).<sup>11</sup>

The medication clozapine is approved by the Food and Drug Administration for suicide prevention in people with schizophrenia.<sup>12</sup> Other promising medications and psychosocial treatments for suicidal people are being tested.

Since research shows that older adults and women who die by suicide are likely to have seen a primary care provider in the year before death, improving primary-care providers' ability to recognize and treat risk factors may help prevent suicide among these groups. <sup>13</sup> Improving outreach to men at risk is a major challenge in need of investigation.

### What should I do if I think someone is suicidal?

If you think someone is suicidal, do not leave him or her alone. Try to get the person to seek immediate help from his or her doctor or the nearest hospital emergency room, or call 911. Eliminate access to firearms or other potential tools for suicide, including unsupervised access to medications.

### For More Information About Suicide

- FOR IMMEDIATE HELP, call this toll-free number, available 24 hours a day, every day: 1-800-273-TALK (8255). You will reach the National Suicide Prevention Lifeline, a service available to anyone. You may call for yourself or for someone you care about. All calls are confidential.
- For other information, click on this link to MedlinePlus, part of the National Institutes of Health's National Library of Medicine: <u>Suicide</u> <u>Information and Organizations</u>. For Spanish, click on: (en Español)

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